

**REMARKS**

Claims 1-24 are pending in the application. Favorable reconsideration of the application, as amended, is respectfully requested.

**I. ALLOWABLE SUBJECT MATTER**

Applicant again acknowledges with appreciation the allowance of claims 1-20. Moreover, applicant again notes with appreciation the indicated allowability of claims 23 and 24. Claims 23 and 24 will also be in condition for allowance upon being amended to independent form.

**II. REJECTION OF CLAIMS 21-22 UNDER 35 USC §103(a)**

Claims 21-22 now stand rejected under 35 USC §103(a) based on *Kim* (USP 6,049,361) in view of *Gotou*. This rejection is respectfully traversed for at least the following reasons.

As previously pointed out by applicant, claim 21 has been amended to recite more clearly the operation of the selection circuit. Specifically, the selection circuit identifies whether the carrier signal is modulated in accordance with the first modulation method or the second modulation method. The selection circuit then provides a gain control signal to the input amplifier to amplify the carrier signal with either the first amplifier gain setting or the second amplifier gain setting. Notably, whether the selection circuit causes the carrier signal to be amplified in accordance with the first amplifier gain setting or the second amplifier gain setting is based on the modulation method identified by the selection circuit.

The Examiner admits that *Kim* does not teach a selection circuit which causes the carrier signal to be amplified in accordance with the first amplifier gain setting or the second amplifier gain setting based on the modulation method identified by the selection circuit. However, the Examiner contends that *Gotou* teaches selecting an amplifier adjustment based on the identified modulation method as recited in claim 21. The Examiner concludes that it would have been obvious to modify the teachings of

*Kim* in view of the teachings of *Gotou* so as to result in the claimed invention. Applicant respectfully disagrees for at least the following reasons.

*Gotou* describes a gain control method and circuit. To the extent the Examiner contends that *Gotou* teaches controlling the gain of a variable-gain amplifier based on the *transmission rate* of the received signal, applicant respectfully agrees with the Examiner.

However, applicant respectfully disagrees that *Gotou* teaches or suggests selecting an amplifier adjustment based on the identification of the *modulation method* used to modulate the carrier signal as recited in claim 21. Different *transmission rates* as described in *Gotou* do not represent different *modulation methods* as recited in claim 21.

For example, the present application discusses the possibilities of different modulation methods such as pulse position modulation (PPM), quadrature amplitude modulation (QAM), frequency modulation (FM), phase shift keying (PSK), and other modulation techniques. (See, e.g., Spec., p. 12, Ins. 18-24). Each of these relate to a different method for modulating a carrier signal.

*Gotou* describes detecting different transmission rates and adjusting gain accordingly. However, different transmission rates do not constitute different modulation methods as recited in claim 21. Rather, the different transmission rates represent different rates at which a carrier signal may be received regardless of the particular modulation method. The modulation method itself in *Gotou* is the *exact same modulation method*, regardless of the particular transmission rate. There is no change in the method in which the received signal is modulated (e.g., PPM vs. QAM vs. FM vs. PSK vs. etc.). The different transmission rates as taught in *Gotou* simply represent the fact that data may be received at different data transmission rates.

Thus, even if the teachings of *Gotou* were combined with *Kim*, the result would be a gain control circuit in which the particular gain setting is selected based on the transmission rate of the received signal. *Gotou* does not teach or suggest any type of selection circuit which analyzes the received carrier signal and automatically identifies if the signal has been modulated in accordance with a first modulation method or a

second modulation method. Whether a signal is received at a first transmission rate or a second transmission rate as taught in *Gotou* does not represent a signal having been modulated in accordance with a first method versus a signal having been modulated in accordance with a second method as recited in claim 21.

For at least the above reasons, withdrawal of the rejection of claims 21 and 22 is respectfully requested.

**III. CONCLUSION**

Accordingly, all claims 1-24 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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